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EXAMINER

PATEL, ASHOKKUMAR B

ART UNIT PAPER NUMBER

2154

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/931,960

**Applicant(s)**

KITCHIN, DUNCAN M.

**Examiner**

Ashok B. Patel

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Application Number 09/931, 960 was filed on 08/16/2001. Claims 1-30 are subject to examination.

#### ***Claim Objections***

2. Claims 3 and 23 are objected to because of the following informalities: Claims 3 and 23 recites wherein the apparatus further comprises a first bridge coupling the first DLC circuit to the first wired communication network and a second DLC circuit coupled to the second wired communication network” .

It seems from looking the claim 13 that these claims should read “wherein the apparatus further comprises a first bridge coupling the first DLC circuit to the first wired communication network and a second bridge coupling the second DLC circuit coupled to the second wired communication network.”

Appropriate correction is required. Examiner has considered these corrections for the purpose of the examination.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Thompson et al. (hereinafter Thompson) (US 2004/0214572 A1)

**Referring to claim 1,**

The reference teaches an apparatus (Fig. 6) comprising:

a transceiving circuit to transmit data to or receive data from one or more subscribers through a wireless transmission medium (Page 5, para. [0074], "Each wireless access point (AP) 120 may have a wireless connection or transceiver (e.g., an antenna) and may operate according to various wireless standards, such as wireless Ethernet (IEEE 802.11), Bluetooth, etc.);

a first data link control (DLC) circuit adapted to transmit data between the transceiving circuit and one or more devices coupled to a first wired communication network (Fig.6, page 5, para.[0075],[0076], page 4, para. [0041], [0042] **Note:** The reference teaches "the system provides a plurality of virtual APs, where a virtual AP may comprise access point functionality implemented in software that appears as a physical AP to a PCD. The plurality of virtual APs or "software" APs may be implemented on one or more physical APs, e.g., on a common set of physical APs. For example, each physical AP may implement a plurality of virtual APs. Each instance of a virtual AP executes a complete 802.11 protocol stack, and may be indistinguishable from a hardware AP to any wireless network client(s)" and "Each of the APs may connect to a "wired" LAN. In one embodiment, the "wired" LAN supports a VLAN (Virtual LAN) protocol. In order to partition the network, the network system may maintain a binding between the ESSID and IEEE 802.1(q) VLAN tags or their

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equivalent. This allows a common wired backbone (using VLAN-capable Ethernet switches) to supply a secured "virtual LAN" to each WSP", thereby the reference teaches a path (circuit) adapted to transmit data between the transceiving circuit and one or more devices coupled to a first wired communication network) ; and

a second DLC circuit adapted to transmit data between the transceiving circuit and one or more devices coupled to a second wired communication network (Fig.6, page 5, para.[0075],[0076], page4, para. [0041], [0042] Note: please refer to the explanation on reference's teachings as above for these limitations.).

**Referring to claim 2,**

The reference teaches the apparatus of claim 1, wherein the first and second wired communication networks comprise distinct physical transmission media. (page 5, para.[0075] and [0076])

**Referring to claim 3,**

The reference teaches the apparatus of claim 2, wherein the apparatus further comprises a first bridge coupling the first DLC circuit to the first wired communication network and a second bridge coupling the second DLC circuit coupled to the second wired communication network. (Fig.6, page 13, para. [0147], For example, packets from PCD 110A may be routed to virtual access point 602B which is associated with local network 130. In contrast, PCD 110B of a second user comprises identification information which includes a higher access level which encompasses accessing local resources on network 130 as well as Internet access. In this instance, in addition to local network access, data or packets may also be routed from the PCD 110B through

the access point 120 and directly out to an external access port for Internet access.”, thereby the reference impliedly teaches the coupling bridge to each networks.)

**Referring to claim 4,**

The reference teaches the apparatus of claim 1, wherein the first and second wired communication networks comprise a common physical transmission medium. (page 4, para.[0042], page 5, para.[0075] and [0076])

**Referring to claim 5,**

The reference teaches the apparatus of claim 1, wherein the first DLC circuit is associated with a first media access control (MAC) address on the first wired communication network and the second DLC circuit is associated with a second MAC address on the second wired communication network. (page 3, para. [0031], page 4, para.[0040], page 8, para. [0096]-[0099])

**Referring to claim 6,**

The reference teaches the apparatus of claim 5, wherein the first DLC circuit is adapted to transmit data between a first class of subscribers and devices coupled to the first wired communication network, and wherein the second DLC circuit is adapted to transmit data between a second class of subscribers and devices coupled to the second wired communication network. (Fig.6, page 11, para.[0124], page 12, para.[0136]-[0143])

**Referring to claim 7,**

The reference teaches the apparatus of claim 5, wherein the first and second DLC circuits are coupled to the transceiving circuit at a common lower DLC circuit, and

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wherein the first DLC circuit is coupled to the first wired communication network at a first upper DLC circuit and the second DLC circuit is coupled to the second wired communication network at a second upper DLC control circuit. (page 8, para.[0095], page 4, para. [0041], [0042] **Note:** The reference teaches "the system provides a plurality of virtual APs, where a virtual AP may comprise access point functionality implemented in software that appears as a physical AP to a PCD. The plurality of virtual APs or "software" APs may be implemented on one or more physical APs, e.g., on a common set of physical APs. For example, each physical AP may implement a plurality of virtual APs. Each instance of a virtual AP executes a complete 802.11 protocol stack, and may be indistinguishable from a hardware AP to any wireless network client(s)" and "Each of the APs may connect to a "wired" LAN. In one embodiment, the "wired" LAN supports a VLAN (Virtual LAN) protocol. In order to partition the network, the network system may maintain a binding between the ESSID and IEEE 802.1(q) VLAN tags or their equivalent. This allows a common wired backbone (using VLAN-capable Ethernet switches) to supply a secured "virtual LAN" to each WSP", thereby the reference teaches wherein the first and second DLC circuits are coupled to the transceiving circuit at a common lower DLC circuit (path provided the physical AP) , and wherein the first DLC circuit is coupled to the first wired communication network at a first upper DLC circuit and the second DLC circuit is coupled to the second wired communication network at a second upper DLC control circuit (path provided by each of the virtual Aps to the appropriate network elements via appropriate networks .)

**Referring to claim 8,**

The reference teaches the apparatus of claim 1, the apparatus further comprising circuitry to control transmission of a first beacon signal and a second beacon signal in the wireless transmission medium from the transceiving circuit, the first beacon signal comprising information associated with the first wired communication network and the second beacon signals comprising information associated with the second wired communication network. (Page 3, para.[0032], page 4, para.[0040], Note : The reference teaches "Alternatively, each of the access points may be operable to broadcast requests for identification information, e.g., broadcast recognized System IDs to the PCDs, wherein the PCDs may respond to this broadcast by providing the identification information. Such broadcasts by APs are known as "beacons"., and "The AP may be capable of broadcasting or recognizing any of the plurality of SIDS, behaving appropriately for different SIDS that are received from PCDs of users, and providing network services to each user through that user's corresponding WSP. Thus an AP may be operable to appear as any one of a plurality of different WSP APs, meaning that a single AP may "pretend to be" or behave as an access point dedicated to a particular WSP for each of a plurality of different WSPs.")

**Referring to claims 9 and 10,**

The reference teaches the apparatus of claim 8, wherein the first beacon signal is associated with a first basic service set and the second beacon signal is associated with a second basic service set, and wherein the first beacon signal is associated with a first extended service set and the second beacon signal is associated with a second



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extended service set. (page 15, para.[0158], page 4, para.[0040], page 4, para.[0042], page 6, para.[0081], page 8, para.[0096]-[0098])

**Referring to claim 11,**

Claim 11 is a claim to a method carried out by the apparatus of claim 1. Therefore claim 11 is rejected for the reasons set forth for claim 1.

**Referring to claim 12,**

Claim 12 is a claim to a method carried out by the apparatus of claim 2. Therefore claim 12 is rejected for the reasons set forth for claim 2.

**Referring to claim 13,**

Claim 13 is a claim to a method carried out by the apparatus of claim 3. Therefore claim 13 is rejected for the reasons set forth for claim 3.

**Referring to claim 14,**

Claim 14 is a claim to a method carried out by the apparatus of claim 4. Therefore claim 14 is rejected for the reasons set forth for claim 4.

**Referring to claim 15,**

Claim 15 is a claim to a method carried out by the apparatus of claim 5. Therefore claim 15 is rejected for the reasons set forth for claim 5.

**Referring to claim 16,**

Claim 16 is a claim to a method carried out by the apparatus of claim 6. Therefore claim 16 is rejected for the reasons set forth for claim 6.

**Referring to claim 17,**

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Claim 17 is a claim to a method carried out by the apparatus of claim 7. Therefore claim 17 is rejected for the reasons set forth for claim 7.

**Referring to claim 18,**

Claim 18 is a claim to a method carried out by the apparatus of claim 8. Therefore claim 18 is rejected for the reasons set forth for claim 8.

**Referring to claims 19 and 20,**

Claims 19 and 20 are claims to methods carried out by the apparatus of claims 9 and 10. Therefore claims 19 and 20 are rejected for the reasons set forth for claims 9 and 10.

**Referring to claim 21,**

Claim 21 is a claim to a system that employs the apparatus of claim 1. Therefore claim 21 is rejected for the reasons set forth for claim 1.

**Referring to claim 22,**

Claim 22 is a claim to a system that employs the apparatus of claim 2. Therefore claim 22 is rejected for the reasons set forth for claim 2.

**Referring to claim 23,**

Claim 23 is a claim to a system that employs the apparatus of claim 3. Therefore claim 23 is rejected for the reasons set forth for claim 3.

**Referring to claim 24,**

Claim 24 is a claim to a system that employs the apparatus of claim 4. Therefore claim 24 is rejected for the reasons set forth for claim 4.

**Referring to claim 25,**

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Claim 25 is a claim to a system that employs the apparatus of claim 5. Therefore claim 25 is rejected for the reasons set forth for claim 5.

**Referring to claim 26,**

Claim 26 is a claim to a system that employs the apparatus of claim 6. Therefore claim 26 is rejected for the reasons set forth for claim 6.

**Referring to claim 27,**

Claim 27 is a claim to a system that employs the apparatus of claim 7. Therefore claim 27 is rejected for the reasons set forth for claim 7.

**Referring to claim 28,**

Claim 28 is a claim to a system that employs the apparatus of claim 8. Therefore claim 28 is rejected for the reasons set forth for claim 8.

**Referring to claims 29 and 30,**

Claims 29 and 30 are claims to system that employs the apparatus of claims 9 and 10. Therefore claims 29 and 30 are rejected for the reasons set forth for claims 9 and 10.

***Conclusion***

**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the

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claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp  
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